



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,600	07/23/2004	Iwao Fujisaki	ppa038non	4599
33661	7590	04/24/2009		
IWA0 FUJISAKI				
1-3-14 Park Heim A103				
MITAKASHI Inokashira				
TOKYO, 181-0001				
JAPAN				
EXAMINER				
NGUYEN, DAVID Q				
ART UNIT		PAPER NUMBER		
2617				
MAIL DATE		DELIVERY MODE		
04/24/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/710,600

Applicant(s)

FUJISAKI, IWAO

Examiner

DAVID Q. NGUYEN

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-56 is/are rejected.
- 7) ☒ Claim(s) 57-65 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 46-65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. *IPXL Holdings v. Amazon.com, Inc.*, 430 F.2d 1377, 1384, 77 USPQ2d 1140, 1145 (Fed. Cir. 2005); *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990) (claim directed to an automatic transmission workstand and the method of using it held ambiguous and properly rejected under 35 U.S.C. 112, second paragraph).

Claims 46-65 are rejected because the claims claim both a communication device comprising a microphone, a speaker, an input device, a display and a wireless communication system and the methods steps using the communication device comprising a function implementing step. The single claim which claims both an apparatus and the method steps of using the apparatus is indefinite.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 46-65 are rejected under 35 U.S.C. 101 because the claim are directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Id.* at 1551.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 46 is rejected under 35 U.S.C. 102(e) as being anticipated by Okamura (US 2003/009367 A1).

Regarding claim 46, Okamura discloses a method for a communication device comprising a microphone, a speaker, an input device, a display, and a wireless communicating system (see fig. 1; a mobile phone 1 comprises a microphone 10, speaker 6, operation key 8, display 2), said method comprising:

a function implementing step in which a specific function is implemented (see pars. 0041-0043 and par. 0046; sending voice signal and receiving signal); wherein said communication device implements a voice communicating function and a fixed-line phone communication device remote controlling function (see pars. 0041-0043 and par. 0046; sending voice signal and receiving signal); a 1st voice data input via said microphone is transferred via said wireless communicating system (see pars. 0041-0043 and par. 0046; sending voice signal

and receiving signal) and a 2nd voice data which is different from said 1st voice data received via said wireless communicating system is output via said speaker when said voice communicating function is implemented in said step (see pars. 0041-0043 and par. 0046; sending voice signal and receiving signal); and said communication device is remotely controlled via a fixed-line phone when said fixed-line phone communication device remote controlling function is implemented in said step (see pars. 0041-0043 and par. 0046; sending voice signal and receiving signal).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura (US 2003/0099367 A1) in view of Hasebe (US 2003/0174685A1).

Regarding claim 47, Okamura discloses a method for a communication device comprising a microphone, a speaker, an input device, a display, and a wireless communicating system (see fig. 1; a mobile phone 1 comprises a microphone 10, speaker 6, operation key 8, display 2), said method comprising:

a function implementing step in which a specific function is implemented (see pars. 0041-0043 and par. 0046; sending voice signal and receiving signal); wherein said communication device implements a voice communicating function (see pars. 0041-0043 and par. 0046; sending voice signal and receiving signal); a 1st voice data input via said microphone

is transferred via said wireless communicating system (see pars. 0041-0043 and par. 0046; sending voice signal and receiving signal) and a 2nd voice data which is different from said 1st voice data received via said wireless communicating system is output via said speaker when said voice communicating function is implemented in said step (see pars. 0041-0043 and par. 0046; sending voice signal and receiving signal). Okamura does not mention said communication device is remotely controlled via the Internet when said internet communication device remote controlling function is implemented in said step. However, Hasebe discloses a communication device is remotely controlled via the Internet when said internet communication device remote controlling function is implemented (see fig. 1 and par. 0016). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Hasebe to Okamura so that when a mobile terminal device is used inside a home, a connection to the internet is made via the communication device, and when the terminal device is used outside the home, a connection to a public network is made via a base station.

Regarding claim 48, Okamura discloses a method for a communication device comprising a microphone, a speaker, an input device, a display, and a wireless communicating system (see fig. 1; a mobile phone 1 comprises a microphone 10, speaker 6, operation key 8, display 2), said method comprising:

a function implementing step in which a specific function is implemented (see pars. 0041-0043 and par. 0046; sending voice signal and receiving signal); wherein said communication device implements a voice communicating function and a fixed-line phone communication device remote controlling function (see pars. 0041-0043 and par. 0046; sending voice signal and receiving signal); a 1st voice data input via said microphone is transferred via

said wireless communicating system (see pars. 0041-0043 and par. 0046; sending voice signal and receiving signal) and a 2nd voice data which is different from said 1st voice data received via said wireless communicating system is output via said speaker when said voice communicating function is implemented in said step (see pars. 0041-0043 and par. 0046; sending voice signal and receiving signal); and said communication device is remotely controlled via a fixed-line phone when said fixed-line phone communication device remote controlling function is implemented in said step (see pars. 0041-0043 and par. 0046; sending voice signal and receiving signal). Okamura does not mention said communication device is remotely controlled via the Internet when said internet communication device remote controlling function is implemented in said step. However, Hasebe discloses a communication device is remotely controlled via the Internet when said internet communication device remote controlling function is implemented (see fig. 1 and par. 0016). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Hasebe to Okamura so that when a mobile terminal device is used inside a home, a connection to the internet is made via the communication device, and when the terminal device is used outside the home, a connection to a public network is made via a base station.

5. Claims 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura (US 2003/0099367 A1) in view of Yamaki et al (US 2003/0093503A1).

Regarding claims 49-50, Okamura does not mention wherein said communication device further implements a shortcut icon displaying function, wherein a shortcut icon is displayed on said display, and a software program indicated by said shortcut icon is activated when said shortcut icon is selected; said communication device implements a task tray icon displaying

function, wherein a task tray icon is displayed on said display (see abstract), and a software program indicated by said task tray icon is executed in background. However, Yamaki discloses a communication device implements a shortcut icon displaying function, wherein a shortcut icon is displayed on said display, and a software program indicated by said shortcut icon is activated when said shortcut icon is selected (see par. 1135); a communication device implements a task tray icon displaying function, wherein a task tray icon is displayed on said display (see par. 1135), and a software program indicated by said task tray icon is executed in background (see par. 1135). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Yamaki to Okamura so that user can set functions such as dial clock setting function, secret mode setting function, power mode setting function, silence mode setting function, etc.

6. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura (US 2003/0099367 A1) in view of Weiner (US 6,912,544 B1).

Regarding claim 51, Okamura does not mention wherein said communication device further implements a multiple channel processing function which enables said communication device to send and receive a large amount of data in a short period of time by utilizing multiple channels. However, Weiner (US 6,912,544 B1) discloses a communication device implements a multiple channel processing function which enables said communication device to send and receive a large amount of data in a short period of time by utilizing multiple channels (see col. 5, lines 10-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Weiner to Okamura so that user can use the mobile device to upload or download data quickly.

7. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura (US 2003/0099367 A1) in view of Davidson (GB2386027A).

Regarding claim 52, Okamura does not mention wherein said communication device further implements a solar battery charging function which enables to charge battery of said communication device by utilizing solar panel. However, Davidson et al. disclose a communication device further implements a solar battery charging function which enables to charge battery of said communication device by utilizing solar panel (see abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Davidson et al. to Okamura in order to avoid the phone will cease to function once the power in the battery has run down.

8. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura (US 2003/0099367 A1) in view of Byrnes et al. (US 2002/0002705A1).

Regarding claim 53, Okamura does not mention wherein said communication device further implements a OS updating function which updates operating system of said communication device in a wireless fashion via said wireless communication system. However, Byrnes et al. discloses wherein said communication device further implements a OS updating function which updates operating system of said communication device in a wireless fashion via said wireless communication system (see par. 0016). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Byrnes et al. to Okamura so that user can use his/her phone when his/her phone roam to another network by updating operating system.

9. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura (US 2003/0099367 A1) in view of Roberts et al. (US 2002/0165850A1).

Regarding claim 54, Okamura does not disclose wherein said communication device further implements a device managing function which adds and deletes device controllers attached to or installed in said communication device. However, Robert et al. disclose a communication device further implements a device managing function which adds and deletes device controllers attached to or installed in said communication device (see par. 0015). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Robert et al. to Okamura in order to upgrade the mobile phone.

10. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura (US 2003/0099367 A1) in view of Myr (US 2001/0029425 A1).

Regarding claim 55, Okamura does not disclose wherein said communication device further implements an automobile controlling function wherein said communication device remotely controls, in response to an automobile controlling command input via said input device, an automobile. However, Myr discloses communication device further implements an automobile controlling function wherein said communication device remotely controls, in response to an automobile controlling command input via said input device, an automobile (see fig. 1 and par. 0101). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Myr to Okamura in order to track mobile's position and estimate a current travel time of the mobile.

11. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura (US 2003/0099367 A1) in view of Mukoyama (JP02002252691A).

Regarding claim 56, Okamura does not disclose wherein said communication device further implements an OCR function wherein an image data is input to a camera of said communication device, alphanumeric data is extracted from said image data. However, Mukoyama discloses a communication device further implements an OCR function wherein an image data is input to a camera of said communication device, alphanumeric data is extracted from said image data (see abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Mukoyama to Okamura in order to be able to input printed information of a character and a symbol such as an address, a name and a phone number on a phone by a simple input operation in a quick and sure way.

Allowable Subject Matter

12. Claims 57-65 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 57, the above prior arts do not mention wherein said communication device further implements a voice recognition system which retrieves alphanumeric information from the user's voice input via said microphone; a voice recognition system which retrieves alphanumeric information from the user's voice input via said microphone, and a voice recognition refraining system which refrains from implementing said voice recognition system while a voice communication is implemented by said communication device; a tag function,

wherein a voice tag is linked to a phone number, when said voice tag is detected in the voice data retrieved via said microphone, said phone number is dialed; a voice recognition noise filtering function, wherein a background noise is identified, a filtered voice data is produced by removing said background noise from the voice data input via said microphone, and said communication device is operated by said filtered voice data; a sound/beep auto off function wherein said communication device refrains from outputting a sound data while a voice recognition system is implemented; a voice recognition system auto off function, wherein said voice recognition system auto off function identifies the lapsed time since a voice recognition system is activated and deactivates said voice recognition system after a certain period of time has lapsed; a voice recognition email function which produces a voice produced email which is an email produced by the alphanumeric information retrieved from the user's voice input via said microphone; a voice communication text converting function, wherein a 1st voice data which indicates the voice data of the caller and a 2nd voice data which indicates the voice data of the callee are retrieved, and said 1st voice data and said 2nd voice data are converted to a 1st text data and a 2nd text data respectively, which are displayed on said display; a target device location indicating function, wherein a target device location data identifying request is transferred to a host computing system in a wireless fashion, a map data and a target device location data is received from said host computing system in a wireless fashion, and said map data with the location corresponding to said target device location data indicated thereon is displayed on said display; an auto backup function, wherein the data identified by the user is automatically retrieved from a data storage area of said communication device and transferred to another computing system in a wireless fashion periodically for purposes of storing a backup data

therein; an audio/video data capturing system which retrieves an audiovisual data via said microphone and a camera installed in said communication device, and sends said audiovisual data to another device in a wireless fashion; a caller ID function which retrieves a predetermined color data and/or sound data which is specific to the caller of the incoming call received by said communication device and outputs said predetermined color data and/or sound data from said communication device; a stock purchase function which outputs a notice signal from said communication device when said communication device receives a notice data wherein said notice data is produced by a computing system and sent to said communication device when a stock price of a predetermined stock brand meets a predetermined criteria; and a timer email function which sends an email data to a predetermined email address at the time indicated by an email data sending time data, as specified in the claim.

Regarding claim 58, the above prior arts do not mention wherein said communication device further implements a call blocking function which blocks the incoming call if the identification thereof is included in a call blocking list; an online payment function which sends a payment data indicating a certain amount of currency to a certain computing system or device in a wireless fashion in order for said certain computing system or device to deduct the amount indicated by said payment data from a certain account stored in said certain computing system or device; a navigation system which produces a map indicating the shortest route from a first location to a second location by referring to an attribution data; a remote controlling system which sends a 1st remote control signal in a wireless fashion by which a 1st device is controlled via a network, a 2nd remote control signal in a wireless fashion by which a 2nd device is controlled via a network, and a 3rd remote control signal in a wireless fashion by which a 3rd

device is controlled via a network; an auto emergency calling system wherein said communication device transfers an emergency signal to a certain computing system or device when an impact of a certain level is detected in a predetermined automobile; a cellular TV function which receives a TV data, which is a series of digital data indicating a TV program, via said wireless communication system in a wireless fashion and outputs said TV data from said communication device; a GPS search engine function, wherein a specific criteria is selected by said input device and one or more of geographic locations corresponding to said specific criteria are indicated on said display; a mobile ignition key function which sends a mobile ignition key signal via said wireless communication system in a wireless fashion in order to ignite an engine of an automobile; a voice print authentication system which implements authentication process by utilizing voice data of the user of said communication device; a fingerprint authentication system which implements authentication process by utilizing fingerprint data of the user of said communication device; an auto time adjusting function which automatically adjusts the clock of said communication device by referring to a wireless signal received by said wireless communication system; a video/photo function which implements a video mode and a photo mode, wherein said video/photo function displays moving image data under said video mode and said video/photo function displays still image data under said photo mode on said display; a taxi calling function, wherein a 1st location which indicates the geographic location of said communication device is identified, a 2nd location which indicates the geographic location of the taxi closest to said 1st location is identified, and said 1st location and said 2nd location are indicated on said display; an address book updating function which updates the address book stored in said communication device by personal computer via network; a batch address book

updating function which updates all address books of a plurality of devices including said communication device in one action; a batch scheduler updating function which updates all schedulers of a plurality of devices including said communication device in one action; and a calculating function which implements mathematical calculation by utilizing digits input via said input device, as specified in the claim.

Regarding claim 59, the above prior arts do not mention wherein said communication device further implements a spreadsheet function which displays a spreadsheet on said display, wherein said spreadsheet includes a plurality of cells which are aligned in a matrix fashion; a word processing function which implements a bold formatting function, an italic formatting function, and/or a font formatting function, wherein said bold formatting function changes alphanumeric data to bold, said italic formatting function changes alphanumeric data to italic, and said font formatting function changes alphanumeric data to a selected font; a TV remote controlling function wherein a TV control signal is transferred via said wireless communication system, said TV control signal is a wireless signal to control a TV tuner; a CD/PC inter-communicating function which retrieves the data stored in a data storage area and transfers said data directly to another computer by utilizing infra-red signal in a wireless fashion; a pre-dialing/dialing/waiting sound selecting function, wherein a selected pre-dialing sound which is one of the plurality of pre-dialing sound is registered, a selected dialing sound which is one of the plurality of dialing sound is registered, and a selected waiting sound which is one of the plurality of waiting sound is registered by the user of said communication device, and during the process of implementing a voice communication mode, said selected pre-dialing sound is output from said speaker before a dialing process is initiated, said selected dialing sound is output from

said speaker during said dialing process is initiated, and said selected waiting sound is output from said speaker after said dialing process is completed; a startup software function, wherein a startup software identification data storage area stores a startup software identification data which is an identification of a certain software program selected by the user, when the power of said communication device is turned on, said startup software function retrieves said startup software identification data from said startup software identification data storage area and activates said certain software program said display includes a 1st display and a 2nd display which display visual data in a stereo fashion, said microphone includes a 1st microphone and a 2nd microphone which input audio data in a stereo fashion, and said communication device further comprises a vibrator which vibrates said communication device, an infra-red transmitting device which transmits infra-red signals, a flash light unit which emits strobe light, a removable memory which stores a plurality of digital data and removable from said communication device, and a photometer which a sensor to detect light intensity; a stereo audio data output function which enables said communication device to output audio data in a stereo fashion; a stereo visual data output function, wherein a left visual data storage area stores a left visual data, a right visual data storage area stores a right visual data, stereo visual data output function retrieves said left visual data from said left visual data storage area and displays on a left display and retrieves said right visual data from said right visual data storage area and displays on a right display; a multiple signal processing function, wherein said communication implements wireless communication under a 1st mode and a 2nd mode, said wireless communication is implemented by utilizing cdma2000 signal under said 1st mode, and said wireless communication is implemented by utilizing W-CDMA signal under said 2nd mode; a pin-pointing function,

wherein a plurality of in-door access points are installed in an artificial structure, a target device location data which indicates the current geographic location of another device is identified by the geographical relation between said plurality of in-door access points and said another device, and said target device location data is indicated on said display; a CCD bar code reader function, wherein a bar code data storage area stores a plurality of bar code data, each of said plurality of bar code data corresponds to a specific alphanumeric data, said CCD bar code reader function identifies the bar code data corresponding to a bar code retrieved via a camera and identifies and displays the alphanumeric data corresponding to the identified bar code data; an online renting function which enables the user of communication device to download from another computing system and rent digital information for a certain period of time; an SOS calling function, wherein when a specific call is made from said communication device, said SOS calling function retrieves a current geographic location data from a current geographic location data storage area and retrieves a personal information data from a personal information data storage area and transfers said current geographic location data and said personal information data to a specific device in a wireless fashion; a PC remote controlling function, wherein an image data is produced by a personal computer, said image data is displayed on said personal computer, said image data is transferred to said communication device, said image data is received via said wireless communication system in a wireless fashion and stored in a data storage area, said image data is retrieved from said data storage area and displayed on said display, a remote control signal input via said input device is transferred to said personal computer via said wireless communication system in a wireless fashion, and said personal computer is controlled in accordance with said remote control signal; a PC remote downloading function, wherein said

communication device sends a data transferring instruction signal to a 1st computer via said wireless communication system in a wireless fashion, wherein said data transferring instruction signal indicates an instruction to said 1st computer to transfer a specific data stored therein to a 2nd computer; an audiovisual playback function, wherein an audiovisual data storage area stores a plurality of audiovisual data, an audiovisual data is selected from said audiovisual data storage area, said audiovisual playback function replays said audiovisual data if a replaying command is input via said input device, said audiovisual playback function pauses to replay said audiovisual data if a replay pausing command is input via said input device, said audiovisual playback function resumes to replay said audiovisual data if a replay resuming command is input via said input device, said audiovisual playback function terminates to replay said audiovisual data if a replay terminating command is input via said input device, said audiovisual playback function fast-forwards to replay said audiovisual data if a replay fast-forwarding command is input via said input device, and said audiovisual playback function fast-rewinds to replay said audiovisual data if a replay fast-rewinding command is input via said input device; an audio playback function which enables said communication device to playback audio data selected by the user of said communication device; and a ticket purchasing function which enables said communication device to purchase tickets in a wireless fashion, as specified in the claim.

Regarding claim 60, the above prior arts do not mention wherein said communication device further implements a remote data erasing function, wherein a data storage area stores a plurality of data, said remote data erasing function deletes a portion or all data stored in said data storage area in accordance with a data erasing command received from another computer via said wireless communication system in a wireless fashion, said data erasing command identifies the

data to be erased selected by the user; a business card function which retrieves a 1st business card data indicating the name, title, phone number, email address, and office address of the user of said communication device from said data storage area and sends via said wireless communication system in a wireless fashion and receives a 2nd business card data indicating the name, title, phone number, email address, and office address of the user of another device via said wireless communication system in a wireless fashion and stores said 2nd business card data in said data storage area; a game vibrating function which activates a vibrator of said communication device when a 1st game object contacts a 2nd game object displayed on said display; a part-timer finding function which enables the user of said communication device to find a part-time job in a specified manner by utilizing said communication device; a parking lot finding function which enables said communication device to display the closest parking lot with vacant spaces on said display with the best route thereto; an on demand TV function which enables said communication device to display TV program on said display in accordance with the user's demand; an inter-communicating TV function which enables said communication device to send answer data to host computing system at which said answer data from a plurality of communication devices including said communication device are counted and the counting data is produced; a display controlling function which enables said communication device to control the brightness and/or the contrast of said display per file opened or software program executed; a multiple party communicating function which enables the user of said communication device to voice communicate with more than one person via said communication device; a display brightness controlling function which controls the brightness of said display in accordance with the brightness detected by a photometer of the surrounding area of the user of

said communication device; a multiple party pin-pointing function which enables said communication device to display the current locations of a plurality of devices in artificial structure; a digital camera function, wherein a photo quality identifying command is input via said input device, when a photo taking command is input via said input device, a photo data retrieved via a camera is stored in a photo data storage area with the quality indicated by said photo quality identifying command; a phone number linking function which displays a phone number link and dials a phone number indicated by said phone number link when said phone number link is selected; And a multiple window displaying function which displays a plurality of windows imultaneously on said display, as specified in the claim.

Regarding claim 61, the above prior arts do not mention wherein said communication device further implements a mouse pointer displaying function which displays on said display a mouse pointer which is capable to be manipulated by the user of said communication device; a house item pin-pointing function which enables the user of said communication device to find the location of the house items for which the user is looking in a house, wherein the house items are the tangible objects placed in a house which are movable by human being; a membership administrating function in which host computing system allows only the users of said communication device who have paid the monthly fee to access host computing system to implement a certain function; a keyword search timer recording function which enables to timer record TV programs which meet a certain criteria set by the user of said communication device; a weather forecast displaying function which displays on said display the weather forecast of the current location of said communication device; a multiple language displaying function, wherein a selected language is selected from a plurality of languages, and said selected language is

utilized to operate said communication device; a caller's information displaying function which displays personal information regarding caller on said display when said communication device receives a phone call; a shortcut icon displaying function, wherein a shortcut icon is displayed on said display, and a software program indicated by said shortcut icon is activated when said shortcut icon is selected; a task tray icon displaying function, wherein a task tray icon is displayed on said display, and a software program indicated by said task tray icon is executed in background; a multiple channel processing function which enables said communication device to send and receive a large amount of data in a short period of time by utilizing multiple channels; a solar battery charging function which enables to charge battery of said communication device by utilizing solar panel; a OS updating function which updates operating system of said communication device in a wireless fashion via said wireless communication system; a device managing function which adds and deletes device controllers attached to or installed in said communication device; an automobile controlling function wherein said communication device remotely controls, in response to an automobile controlling command input via said input device, an automobile; and an OCR function wherein an image data is input to a camera of said communication device, alphanumeric data is extracted from said image data, as specified in the claim.

Regarding claim 62, the above prior arts do not mention does not mention wherein said communication device further implements a voice recognition system which retrieves alphanumeric information from the user's voice input via said microphone; a voice recognition system which retrieves alphanumeric information from the user's voice input via said microphone, and a voice recognition refraining system which refrains from implementing said

voice recognition system while a voice communication is implemented by said communication device; a tag function, wherein a voice tag is linked to a phone number, when said voice tag is detected in the voice data retrieved via said microphone, said phone number is dialed; a voice recognition noise filtering function, wherein a background noise is identified, a filtered voice data is produced by removing said background noise from the voice data input via said microphone, and said communication device is operated by said filtered voice data; a sound/beep auto off function wherein said communication device refrains from outputting a sound data while a voice recognition system is implemented; a voice recognition system auto off function, wherein said voice recognition system auto off function identifies the lapsed time since a voice recognition system is activated and deactivates said voice recognition system after a certain period of time has lapsed; a voice recognition email function which produces a voice produced email which is an email produced by the alphanumeric information retrieved from the user's voice input via said microphone; a voice communication text converting function, wherein a 1st voice data which indicates the voice data of the caller and a 2nd voice data which indicates the voice data of the callee are retrieved, and said 1st voice data and said 2nd voice data are converted to a 1st text data and a 2nd text data respectively, which are displayed on said display; a target device location indicating function, wherein a target device location data identifying request is transferred to a host computing system in a wireless fashion, a map data and a target device location data is received from said host computing system in a wireless fashion, and said map data with the location corresponding to said target device location data indicated thereon is displayed on said display; an auto backup function, wherein the data identified by the user is automatically retrieved from a data storage area of said communication device and transferred to

another computing system in a wireless fashion periodically for purposes of storing a backup data therein; an audio/video data capturing system which retrieves an audiovisual data via said microphone and a camera installed in said communication device, and sends said audiovisual data to another device in a wireless fashion; a caller ID function which retrieves a predetermined color data and/or sound data which is specific to the caller of the incoming call received by said communication device and outputs said predetermined color data and/or sound data from said communication device; a stock purchase function which outputs a notice signal from said communication device when said communication device receives a notice data wherein said notice data is produced by a computing system and sent to said communication device when a stock price of a predetermined stock brand meets a predetermined criteria; a timer email function which sends an email data to a predetermined email address at the time indicated by an email data sending time data; a call blocking function which blocks the incoming call if the identification thereof is included in a call blocking list; an online payment function which sends a payment data indicating a certain amount of currency to a certain computing system or device in a wireless fashion in order for said certain computing system or device to deduct the amount indicated by said payment data from a certain account stored in said certain computing system or device; a navigation system which produces a map indicating the shortest route from a first location to a second location by referring to an attribution data; a remote controlling system which sends a 1st remote control signal in a wireless fashion by which a 1st device is controlled via a network, a 2nd remote control signal in a wireless fashion by which a 2nd device is controlled via a network, and a 3rd remote control signal in a wireless fashion by which a 3rd device is controlled via a network; an auto emergency calling system wherein said

communication device transfers an emergency signal to a certain computing system or device when an impact of a certain level is detected in a predetermined automobile; a cellular TV function which receives a TV data, which is a series of digital data indicating a TV program, via said wireless communication system in a wireless fashion and outputs said TV data from said communication device; a GPS search engine function, wherein a specific criteria is selected by said input device and one or more of geographic locations corresponding to said specific criteria are indicated on said display; a mobile ignition key function which sends a mobile ignition key signal via said wireless communication system in a wireless fashion in order to ignite an engine of an automobile; a voice print authentication system which implements authentication process by utilizing voice data of the user of said communication device; a fingerprint authentication system which implements authentication process by utilizing fingerprint data of the user of said communication device; an auto time adjusting function which automatically adjusts the clock of said communication device by referring to a wireless signal received by said wireless communication system; a video/photo function which implements a video mode and a photo mode, wherein said video/photo function displays moving image data under said video mode and said video/photo function displays still image data under said photo mode on said display; a taxi calling function, wherein a 1st location which indicates the geographic location of said communication device is identified, a 2nd location which indicates the geographic location of the taxi closest to said 1st location is identified, and said 1st location and said 2nd location are indicated on said display, as specified in the claim.

Regarding claim 63, the above prior arts do not mention wherein said communication device further implements an address book updating function which updates the address book

stored in said communication device by personal computer via network; a batch address book updating function which updates all address books of a plurality of devices including said communication device in one action; a batch scheduler updating function which updates all schedulers of a plurality of devices including said communication device in one action; a calculating function which implements mathematical calculation by utilizing digits input via said input device; a spreadsheet function which displays a spreadsheet on said display, wherein said spreadsheet includes a plurality of cells which are aligned in a matrix fashion; a word processing function which implements a bold formatting function, an italic formatting function, and/or a font formatting function, wherein said bold formatting function changes alphanumeric data to bold, said italic formatting function changes alphanumeric data to italic, and said font formatting function changes alphanumeric data to a selected font; a TV remote controlling function wherein a TV control signal is transferred via said wireless communication system, said TV control signal is a wireless signal to control a TV tuner; a CD/PC inter-communicating function which retrieves the data stored in a data storage area and transfers said data directly to another computer by utilizing infra-red signal in a wireless fashion; a pre-dialing/dialing/waiting sound selecting function, wherein a selected pre-dialing sound which is one of the plurality of pre-dialing sound is registered, a selected dialing sound which is one of the plurality of dialing sound is registered, and a selected waiting sound which is one of the plurality of waiting sound is registered by the user of said communication device, and during the process of implementing a voice communication mode, said selected pre-dialing sound is output from said speaker before a dialing process is initiated, said selected dialing sound is output from said speaker during said dialing process is initiated, and said selected waiting sound is output from said speaker after said

dialing process is completed; a startup software function, wherein a startup software identification data storage area stores a startup software identification data which is an identification of a certain software program selected by the user, when the power of said communication device is turned on, said startup software function retrieves said startup software identification data from said startup software identification data storage area and activates said certain software program; said display includes a 1st display and a 2nd display which display visual data in a stereo fashion, said microphone includes a 1st microphone and a 2nd microphone which input audio data in a stereo fashion, and said communication device further comprises a vibrator which vibrates said communication device, an infra-red transmitting device which transmits infra-red signals, a flash light unit which emits strobe light, a removable memory which stores a plurality of digital data and removable from said communication device, and a photometer which a sensor to detect light intensity; a stereo audio data output function which enables said communication device to output audio data in a stereo fashion; a stereo visual data output function, wherein a left visual data storage area stores a left visual data, a right visual data storage area stores a right visual data, stereo visual data output function retrieves said left visual data from said left visual data storage area and displays on a left display and retrieves said right visual data from said right visual data storage area and displays on a right display; a multiple signal processing function, wherein said communication implements wireless communication under a 1st mode and a 2nd mode, said wireless communication is implemented by utilizing cdma2000 signal under said 1st mode, and said wireless communication is implemented by utilizing W-CDMA signal under said 2nd mode; a pin-pointing function, wherein a plurality of in-door access points are installed in an artificial structure, a target device location data which

indicates the current geographic location of another device is identified by the geographical relation between said plurality of in-door access points and said another device, and said target device location data is indicated on said display; a CCD bar code reader function, wherein a bar code data storage area stores a plurality of bar code data, each of said plurality of bar code data corresponds to a specific alphanumeric data, said CCD bar code reader function identifies the bar code data corresponding to a bar code retrieved via a camera and identifies and displays the alphanumeric data corresponding to the identified bar code data; an online renting function which enables the user of communication device to download from another computing system and rent digital information for a certain period of time; an SOS calling function, wherein when a specific call is made from said communication device, said SOS calling function retrieves a current geographic location data from a current geographic location data storage area and retrieves a personal information data from a personal information data storage area and transfers said current geographic location data and said personal information data to a specific device in a wireless fashion; a PC remote controlling function, wherein an image data is produced by a personal computer, said image data is displayed on said personal computer, said image data is transferred to said communication device, said image data is received via said wireless communication system in a wireless fashion and stored in a data storage area, said image data is retrieved from said data storage area and displayed on said display, a remote control signal input via said input device is transferred to said personal computer via said wireless communication system in a wireless fashion, and said personal computer is controlled in accordance with said remote control signal; a PC remote downloading function, wherein said communication device sends a data transferring instruction signal to a 1st computer via said wireless communication

system in a wireless fashion, wherein said data transferring instruction signal indicates an instruction to said 1st computer to transfer a specific data stored therein to a 2nd computer; an audiovisual playback function, wherein an audiovisual data storage area stores a plurality of audiovisual data, an audiovisual data is selected from said audiovisual data storage area, said audiovisual playback function replays said audiovisual data if a replaying command is input via said input device, said audiovisual playback function pauses to replay said audiovisual data if a replay pausing command is input via said input device, said audiovisual playback function resumes to replay said audiovisual data if a replay resuming command is input via said input device, said audiovisual playback function terminates to replay said audiovisual data if a replay terminating command is input via said input device, said audiovisual playback function fast-forwards to replay said audiovisual data if a replay fast-forwarding command is input via said input device, and said audiovisual playback function fast-rewinds to replay said audiovisual data if a replay fast-rewinding command is input via said input device; an audio playback function which enables said communication device to playback audio data selected by the user of said communication device; a ticket purchasing function which enables said communication device to purchase tickets in a wireless fashion; a remote data erasing function, wherein a data storage area stores a plurality of data, said remote data erasing function deletes a portion or all data stored in said data storage area in accordance with a data erasing command received from another computer via said wireless communication system in a wireless fashion, said data erasing command identifies the data to be erased selected by the user; a business card function which retrieves a 1st business card data indicating the name, title, phone number, email address, and office address of the user of said communication device from said data storage area and sends via

said wireless communication system in a wireless fashion and receives a 2nd business card data indicating the name, title, phone number, email address, and office address of the user of another device via said wireless communication system in a wireless fashion and stores said 2nd business card data in said data storage area; a game vibrating function which activates a vibrator of said communication device when a 1st game object contacts a 2nd game object displayed on said display; a part-timer finding function which enables the user of said communication device to find a part-time job in a specified manner by utilizing said communication device; a parking lot finding function which enables said communication device to display the closest parking lot with vacant spaces on said display with the best route thereto; an on demand TV function which enables said communication device to display TV program on said display in accordance with the user's demand; an inter-communicating TV function which enables said communication device to send answer data to host computing system at which said answer data from a plurality of communication devices including said communication device are counted and the counting data is produced; a display controlling function which enables said communication device to control the brightness and/or the contrast of said display per file opened or software program executed; a multiple party communicating function which enables the user of said communication device to voice communicate with more than one person via said communication device; and a display brightness controlling function which controls the brightness of said display in accordance with the brightness detected by a photometer of the surrounding area of the user of said communication device, as specified in the claim.

Regarding claim 64, the above prior arts do not mention wherein said communication device further implements a multiple party pin-pointing function which enables said

communication device to display the current locations of a plurality of devices in artificial structure; a digital camera function, wherein a photo quality identifying command is input via said input device, when a photo taking command is input via said input device, a photo data retrieved via a camera is stored in a photo data storage area with the quality indicated by said photo quality identifying command; a phone number linking function which displays a phone number link and dials a phone number indicated by said phone number link when said phone number link is selected; a multiple window displaying function which displays a plurality of windows simultaneously on said display; a mouse pointer displaying function which displays on said display a mouse pointer which is capable to be manipulated by the user of said communication device; a house item pin-pointing function which enables the user of said communication device to find the location of the house items for which the user is looking in a house, wherein the house items are the tangible objects placed in a house which are movable by human being; a membership administrating function in which host computing system allows only the users of said communication device who have paid the monthly fee to access host computing system to implement a certain function; a keyword search timer recording function which enables to timer record TV programs which meet a certain criteria set by the user of said communication device; a weather forecast displaying function which displays on said display the weather forecast of the current location of said communication device; a multiple language displaying function, wherein a selected language is selected from a plurality of languages, and said selected language is utilized to operate said communication device; a caller's information displaying function which displays personal information regarding caller on said display when said communication device receives a phone call; a shortcut icon displaying function, wherein a

shortcut icon is displayed on said display, and a software program indicated by said shortcut icon is activated when said shortcut icon is selected; a task tray icon displaying function, wherein a task tray icon is displayed on said display, and a software program indicated by said task tray icon is executed in background; a multiple channel processing function which enables said communication device to send and receive a large amount of data in a short period of time by utilizing multiple channels; a solar battery charging function which enables to charge battery of said communication device by utilizing solar panel; a OS updating function which updates operating system of said communication device in a wireless fashion via said wireless communication system; a device managing function which adds and deletes device controllers attached to or installed in said communication device; an automobile controlling function wherein said communication device remotely controls, in response to an automobile controlling command input via said input device, an automobile; and an OCR function wherein an image data is input to a camera of said communication device, alphanumeric data is extracted from said image data, as specified in the claim.

Regarding claim 65, the above prior arts do not mention wherein said communication device further implements a voice recognition system which retrieves alphanumeric information from the user's voice input via said microphone; a voice recognition system which retrieves alphanumeric information from the user's voice input via said microphone, and a voice recognition refraining system which refrains from implementing said voice recognition system while a voice communication is implemented by said communication device; a tag function, wherein a voice tag is linked to a phone number, when said voice tag is detected in the voice data retrieved via said microphone, said phone number is dialed; a voice recognition noise filtering

function, wherein a background noise is identified, a filtered voice data is produced by removing said background noise from the voice data input via said microphone, and said communication device is operated by said filtered voice data; a sound/beep auto off function wherein said communication device refrains from outputting a sound data while a voice recognition system is implemented; a voice recognition system auto off function, wherein said voice recognition system auto off function identifies the lapsed time since a voice recognition system is activated and deactivates said voice recognition system after a certain period of time has lapsed; a voice recognition email function which produces a voice produced email which is an email produced by the alphanumeric information retrieved from the user's voice input via said microphone; a voice communication text converting function, wherein a 1st voice data which indicates the voice data of the caller and a 2nd voice data which indicates the voice data of the callee are retrieved, and said 1st voice data and said 2nd voice data are converted to a 1st text data and a 2nd text data respectively, which are displayed on said display; a target device location indicating function, wherein a target device location data identifying request is transferred to a host computing system in a wireless fashion, a map data and a target device location data is received from said host computing system in a wireless fashion, and said map data with the location corresponding to said target device location data indicated thereon is displayed on said display; an auto backup function, wherein the data identified by the user is automatically retrieved from a data storage area of said communication device and transferred to another computing system in a wireless fashion periodically for purposes of storing a backup data therein; an audio/video data capturing system which retrieves an audiovisual data via said microphone and a camera installed in said communication device, and sends said audiovisual

data to another device in a wireless fashion; a caller ID function which retrieves a predetermined color data and/or sound data which is specific to the caller of the incoming call received by said communication device and outputs said predetermined color data and/or sound data from said communication device; a stock purchase function which outputs a notice signal from said communication device when said communication device receives a notice data wherein said notice data is produced by a computing system and sent to said communication device when a stock price of a predetermined stock brand meets a predetermined criteria; a timer email function which sends an email data to a predetermined email address at the time indicated by an email data sending time data; a call blocking function which blocks the incoming call if the identification thereof is included in a call blocking list; an online payment function which sends a payment data indicating a certain amount of currency to a certain computing system or device in a wireless fashion in order for said certain computing system or device to deduct the amount indicated by said payment data from a certain account stored in said certain computing system or device; a navigation system which produces a map indicating the shortest route from a first location to a second location by referring to an attribution data; a remote controlling system which sends a 1st remote control signal in a wireless fashion by which a 1st device is controlled via a network, a 2nd remote control signal in a wireless fashion by which a 2nd device is controlled via a network, and a 3rd remote control signal in a wireless fashion by which a 3rd device is controlled via a network; an auto emergency calling system wherein said communication device transfers an emergency signal to a certain computing system or device when an impact of a certain level is detected in a predetermined automobile; a cellular TV function which receives a TV data, which is a series of digital data indicating a TV program, via

said wireless communication system in a wireless fashion and outputs said TV data from said communication device; a GPS search engine function, wherein a specific criteria is selected by said input device and one or more of geographic locations corresponding to said specific criteria are indicated on said display; a mobile ignition key function which sends a mobile ignition key signal via said wireless communication system in a wireless fashion in order to ignite an engine of an automobile; a voice print authentication system which implements authentication process by utilizing voice data of the user of said communication device; a fingerprint authentication system which implements authentication process by utilizing fingerprint data of the user of said communication device; an auto time adjusting function which automatically adjusts the clock of said communication device by referring to a wireless signal received by said wireless communication system; a video/photo function which implements a video mode and a photo mode, wherein said video/photo function displays moving image data under said video mode and said video/photo function displays still image data under said photo mode on said display; a taxi calling function, wherein a 1st location which indicates the geographic location of said communication device is identified, a 2nd location which indicates the geographic location of the taxi closest to said 1st location is identified, and said 1st location and said 2nd location are indicated on said display; an address book updating function which updates the address book stored in said communication device by personal computer via network; a batch address book updating function which updates all address books of a plurality of devices including said communication device in one action; a batch scheduler updating function which updates all schedulers of a plurality of devices including said communication device in one action; a calculating function which implements mathematical calculation by utilizing digits input via said

input device; a spreadsheet function which displays a spreadsheet on said display, wherein said spreadsheet includes a plurality of cells which are aligned in a matrix fashion; a word processing function which implements a bold formatting function, an italic formatting function, and/or a font formatting function, wherein said bold formatting function changes alphanumeric data to bold, said italic formatting function changes alphanumeric data to italic, and said font formatting function changes alphanumeric data to a selected font; a TV remote controlling function wherein a TV control signal is transferred via said wireless communication system, said TV control signal is a wireless signal to control a TV tuner; a CD/PC inter-communicating function which retrieves the data stored in a data storage area and transfers said data directly to another computer by utilizing infra-red signal in a wireless fashion; a pre-dialing/dialing/waiting sound selecting function, wherein a selected pre-dialing sound which is one of the plurality of pre-dialing sound is registered, a selected dialing sound which is one of the plurality of dialing sound is registered, and a selected waiting sound which is one of the plurality of waiting sound is registered by the user of said communication device, and during the process of implementing a voice communication mode, said selected pre-dialing sound is output from said speaker before a dialing process is initiated, said selected dialing sound is output from said speaker during said dialing process is initiated, and said selected waiting sound is output from said speaker after said dialing process is completed; a startup software function, wherein a startup software identification data storage area stores a startup software identification data which is an identification of a certain software program selected by the user, when the power of said communication device is turned on, said startup software function retrieves said startup software identification data from said startup software identification data storage area and activates said

certain software program; said display includes a 1st display and a 2nd display which display visual data in a stereo fashion, said microphone includes a 1st microphone and a 2nd microphone which input audio data in a stereo fashion, and said communication device further comprises a vibrator which vibrates said communication device, an infra-red transmitting device which transmits infra-red signals, a flash light unit which emits strobe light, a removable memory which stores a plurality of digital data and removable from said communication device, and a photometer which a sensor to detect light intensity; a stereo audio data output function which enables said communication device to output audio data in a stereo fashion; a stereo visual data output function, wherein a left visual data storage area stores a left visual data, a right visual data storage area stores a right visual data, stereo visual data output function retrieves said left visual data from said left visual data storage area and displays on a left display and retrieves said right visual data from said right visual data storage area and displays on a right display; a multiple signal processing function, wherein said communication implements wireless communication under a 1st mode and a 2nd mode, said wireless communication is implemented by utilizing cdma2000 signal under said 1st mode, and said wireless communication is implemented by utilizing W-CDMA signal under said 2nd mode; a pin-pointing function, wherein a plurality of in-door access points are installed in an artificial structure, a target device location data which indicates the current geographic location of another device is identified by the geographical relation between said plurality of in-door access points and said another device, and said target device location data is indicated on said display; a CCD bar code reader function, wherein a bar code data storage area stores a plurality of bar code data, each of said plurality of bar code data corresponds to a specific alphanumeric data, said CCD bar code reader function identifies the bar

code data corresponding to a bar code retrieved via a camera and identifies and displays the alphanumeric data corresponding to the identified bar code data; an online renting function which enables the user of communication device to download from another computing system and rent digital information for a certain period of time; an SOS calling function, wherein when a specific call is made from said communication device, said SOS calling function retrieves a current geographic location data from a current geographic location data storage area and retrieves a personal information data from a personal information data storage area and transfers said current geographic location data and said personal information data to a specific device in a wireless fashion; a PC remote controlling function, wherein an image data is produced by a personal computer, said image data is displayed on said personal computer, said image data is transferred to said communication device, said image data is received via said wireless communication system in a wireless fashion and stored in a data storage area, said image data is retrieved from said data storage area and displayed on said display, a remote control signal input via said input device is transferred to said personal computer via said wireless communication system in a wireless fashion, and said personal computer is controlled in accordance with said remote control signal; a PC remote downloading function, wherein said communication device sends a data transferring instruction signal to a 1st computer via said wireless communication system in a wireless fashion, wherein said data transferring instruction signal indicates an instruction to said 1st computer to transfer a specific data stored therein to a 2nd computer; an audiovisual playback function, wherein an audiovisual data storage area stores a plurality of audiovisual data, an audiovisual data is selected from said audiovisual data storage area, said audiovisual playback function replays said audiovisual data if a replaying command is input via

said input device, said audiovisual playback function pauses to replay said audiovisual data if a replay pausing command is input via said input device, said audiovisual playback function resumes to replay said audiovisual data if a replay resuming command is input via said input device, said audiovisual playback function terminates to replay said audiovisual data if a replay terminating command is input via said input device, said audiovisual playback function fast-forwards to replay said audiovisual data if a replay fast-forwarding command is input via said input device, and said audiovisual playback function fast-rewinds to replay said audiovisual data if a replay fast-rewinding command is input via said input device; an audio playback function which enables said communication device to playback audio data selected by the user of said communication device; a ticket purchasing function which enables said communication device to purchase tickets in a wireless fashion; a remote data erasing function, wherein a data storage area stores a plurality of data, said remote data erasing function deletes a portion or all data stored in said data storage area in accordance with a data erasing command received from another computer via said wireless communication system in a wireless fashion, said data erasing command identifies the data to be erased selected by the user; a business card function which retrieves a 1st business card data indicating the name, title, phone number, email address, and office address of the user of said communication device from said data storage area and sends via said wireless communication system in a wireless fashion and receives a 2nd business card data indicating the name, title, phone number, email address, and office address of the user of another device via said wireless communication system in a wireless fashion and stores said 2nd business card data in said data storage area; a game vibrating function which activates a vibrator of said communication device when a 1st game object contacts a 2nd game object displayed on said

display; a part-timer finding function which enables the user of said communication device to find a part-time job in a specified manner by utilizing said communication device; a parking lot finding function which enables said communication device to display the closest parking lot with vacant spaces on said display with the best route thereto; an on demand TV function which enables said communication device to display TV program on said display in accordance with the user's demand; an inter-communicating TV function which enables said communication device to send answer data to host computing system at which said answer data from a plurality of communication devices including said communication device are counted and the counting data is produced; a display controlling function which enables said communication device to control the brightness and/or the contrast of said display per file opened or software program executed; a multiple party communicating function which enables the user of said communication device to voice communicate with more than one person via said communication device; a display brightness controlling function which controls the brightness of said display in accordance with the brightness detected by a photometer of the surrounding area of the user of said communication device; a multiple party pin-pointing function which enables said communication device to display the current locations of a plurality of devices in artificial structure; a digital camera function, wherein a photo quality identifying command is input via said input device, when a photo taking command is input via said input device, a photo data retrieved via a camera is stored in a photo data storage area with the quality indicated by said photo quality identifying command; a phone number linking function which displays a phone number link and dials a phone number indicated by said phone number link when said phone number link is selected; a multiple window displaying function which displays a plurality of

windows simultaneously on said display; a mouse pointer displaying function which displays on said display a mouse pointer which is capable to be manipulated by the user of said communication device; a house item pin-pointing function which enables the user of said communication device to find the location of the house items for which the user is looking in a house, wherein the house items are the tangible objects placed in a house which are movable by human being; a membership administrating function in which host computing system allows only the users of said communication device who have paid the monthly fee to access host computing system to implement a certain function; a keyword search timer recording function which enables to timer record TV programs which meet a certain criteria set by the user of said communication device; a weather forecast displaying function which displays on said display the weather forecast of the current location of said communication device; a multiple language displaying function, wherein a selected language is selected from a plurality of languages, and said selected language is utilized to operate said communication device; a caller's information displaying function which displays personal information regarding caller on said display when said communication device receives a phone call; a shortcut icon displaying function, wherein a shortcut icon is displayed on said display, and a software program indicated by said shortcut icon is activated when said shortcut icon is selected; a task tray icon displaying function, wherein a task tray icon is displayed on said display, and a software program indicated by said task tray icon is executed in background; a multiple channel processing function which enables said communication device to send and receive a large amount of data in a short period of time by utilizing multiple channels; a solar battery charging function which enables to charge battery of said communication device by utilizing solar panel; a OS updating function which updates

operating system of said communication device in a wireless fashion via said wireless communication system; a device managing function which adds and deletes device controllers attached to or installed in said communication device; an automobile controlling function wherein said communication device remotely controls, in response to an automobile controlling command input via said input device, an automobile; and an OCR function wherein an image data is input to a camera of said communication device, alphanumeric data is extracted from said image data, as specified in the claim.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID Q. NGUYEN whose telephone number is (571)272-7844. The examiner can normally be reached on 8:30AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bost Dwayne can be reached on (571)272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/710,600

Page 41

Art Unit: 2617

/David Q Nguyen/

Primary Examiner, Art Unit 2617